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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/346,752 07/02/99 DELDUCA

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EXAMINER

IM22/1207

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ART UNIT	PAPER NUMBER

1721

DATE MAILED:

12/07/99

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/346,752

Applicant(s)

Delduca et al

Examiner

LaToya Cross

Group Art Unit

1721



☒ Responsive to communication(s) filed on Jul 2, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1 and 11-21 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1 and 11-21 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 3

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1 and 11-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 contains the phrase "the amount of said oxygen absorber" for which there is insufficient antecedent basis.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1, 11, 13-15, 17-19, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 4,588,561 to Aswell et al (hereinafter referred to as Aswell et al '561).

Applicants' claimed invention is directed to an oxygen scavenging packet comprising an oxygen permeable material formed into a closed packet, an oxygen absorber comprising iron within the closed packet, and a liquid oxygen uptake accelerator comprising water. The accelerator is present in an amount such that when the accelerator is contacted with the oxygen absorber, the oxygen content of a predetermined volume containing about 2% by volume oxygen to less than 0.5% by volume at a temperature of about 34°F in no more than 90 minutes.

Aswell et al '561 discloses a package for removing oxygen from a gaseous mixture. The package includes a gas impermeable sealable container having a sachet (packet) disposed therein. The packet contains an oxygen absorber such as iron (col. 3, lines 40-50). Also provided in the package is a carbon dioxide generator, such as an acid and a salt (col. 3, lines 51-68). Suitable acids include citric acid. Silica gel may also be added (col. 4, lines 4-6). Water (an uptake accelerator) is added to the oxygen absorber to activate the oxygen absorber and achieve sufficient oxygen reduction (col. 4, lines 53-56).

Aswell et al '561 differ from the instantly claimed invention in that the reference does not specifically state that 2% volume oxygen is reduced to less than 0.5% volume when the oxygen absorber is in contact with the uptake accelerator. However, at col. 4, lines 14-46, Aswell et al '561 discloses preferred amounts of oxygen absorber (iron) and uptake accelerator (water).

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Aswell '561 teaches the use of 25-35 percent by weight iron and about 60-80 percent by water. Applicants suggest that the use of 0.2-0.8mL of water per 2.5g of iron is sufficient to achieve the desired oxygen reduction (specification page 10). Thus, it is believed that the amounts of oxygen absorber and uptake accelerator as disclosed by Aswell '561 are suitable enough to provide sufficient oxygen reduction, absent evidence to the contrary.

Therefore, for the reasons set forth above, Applicants' claimed invention is deemed to be obvious, within the meaning of 35 U.S.C. 103, in view of the teachings of Aswell et al '561.

5. Claims 1, 12, 16, 17, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 4,820,442 to Motoyama et al (hereinafter referred to as Motoyama '442), in view of U.S. Patent 5,242,111 to Nakoneczny (herein referred to as Nakoneczny '111).

Applicants' claimed invention is directed to an oxygen scavenging packet comprising an oxygen permeable material formed into a closed packet, an oxygen absorber comprising iron within the closed packet, and a liquid oxygen uptake accelerator comprising water. The accelerator is present in an amount such that when the accelerator is contacted with the oxygen absorber, the oxygen content of a predetermined volume containing about 2% by volume oxygen to less than 0.5% by volume at a temperature of about 34°F in no more than 90 minutes.

Motoyama et al '442 discloses preservative compositions for food products. The compositions of Motoyama et al '442 comprise an oxygen absorber and an uptake accelerator. The oxygen absorber is a metal powder such as iron (see claim 1 of Aswell '442). The uptake

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accelerator is water (col. 2, lines 42-62). The composition also comprises a salt (col. 2, lines 37-41). The compositions of Motoyama '442 are disclosed as being capable of reducing the oxygen content to less than 0.01%. See table I.

Motoyama '442 differs from the instantly claimed invention in that although the examples clearly teach aqueous solutions comprising iron as oxygen scavenging compositions, there is no direct disclosure of the specific amounts of water present. One of ordinary skill in the art would expect that the amounts of water (uptake accelerator) are similar to those instantly claimed by Applicants since the compositions of Motoyama '442 are capable of reducing the oxygen content to less than 0.01%.

Regarding instant claim 16, Motoyama '442 also differs from the instantly claimed invention in that there is no disclosure of the oxygen uptake accelerator being contained within a bibulous wick. However, the use of wicks to bring oxygen absorber in contact with uptake accelerators is known in the art. See Nakoneczny et al '111 (figures 15 and 16). It would have been obvious to one of ordinary skill in the art to use an uptake accelerator contained on a bibulous wick.

Therefore, for the reasons set forth above, Applicants' claimed invention is deemed to be obvious, within the meaning of 35 USC 103, in view of the teachings of Motoyama et al '442.

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Citation of Relevant Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaToya I. Cross whose telephone number is (703) 305-7360. The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gabrielle Brouillette, can be reached at (703) 308-0756. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-5408.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

LIC *SLC*
December 3, 1999

G. Brouillette
GABRIELLE BROUILLETTE
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